## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of Customer Number: 46320

Scott CARRIER Confirmation Number: 9171

Application No.: 10/712,544 Group Art Unit: 2178

Filed: November 13, 2003 Examiner: M. Patel

For: LIGHTWEIGHT FORM PATTERN VALIDATION

## **REPLY BRIEF**

Mail Stop Appeal Brief - Patents **Commissioner For Patents** P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

This Reply Brief is submitted under 37 C.F.R. § 41.41 in response to the EXAMINER'S ANSWER dated July 24, 2008.

The Examiner's response to Appellant's arguments submitted in the Second Appeal Brief of April 25, 2008 (hereinafter the Second Appeal Brief), raises additional issues and underscores the factual and legal shortcomings in the Examiner's rejection. In response, Appellant relies upon the arguments presented in the Second Appeal Brief and the arguments set forth below.

1 REMARKS

On page 7 of the Second Appeal Brief, Appellant pointed out where the Examiner's
Answer is required to include particular content discussed in M.P.E.P. § 1207.02, yet the
Examiner has completely ignored this requirement. As noted throughout the prosecution of this
application and in the Appeal Brief, the Examiner has failed to properly establish the facts
underlying the Examiner's analysis. As noted in the paragraph spanning pages 8 and 9 of the
Second Appeal Brief, Appellant's position is that these omissions in the Examiner's prima facie
analysis are correctable by the Examiner, and the correction of these omissions would help both
Appellant and the Honorable Board gain a better understanding of the underlying facts and
analysis employed by the Examiner in rejecting the claims. Appellant, therefore, respectfully
recommends that the Honorable Board remand the present application to the Examiner to address
these omissions

## Rejection under 35 U.S.C. § 101

The Examiner's response to the arguments presented on pages 5 and 6 of the Second Appeal Brief is found on page 10 of the Examiner's Answer and reproduced below:

The Examiner Respectfully Disagrees: Contrary to arguments made by Appellant, use of the word "system" does not inherently mean that the claim is directed to a machine. Only if at least one of the claimed elements of the system is a physical part of a device can the system constitute part of a device or a combination of devices to be a machine within the meaning of 101. A validation processor is not an actual hardware element; instead it describes software per se thus failing to fall within the statutory category of invention because it fails to be tangibly embodied in a computer readable medium to be used by anything including "a client device". (emphasis added)

Referring to the underlined portions of the above-reproduced passage, the Examiner's analysis reflects a failure to properly consider the meaning of the phrase "software per se." The definition

of the legal term "per se" is the following:<sup>1</sup>

By itself; in itself; taken alone; by means of itself; through itself; inherently; in isolation; unconnected with other matters; simply as such; in its own natures without reference to its relation.

Thus, by definition, software per se is software, by itself, unconnected from anything else (e.g.,

hardware). Thus, software per se is either an abstract idea or functional descriptive material (i.e.,

a description of the software written on a piece of paper). In either instance, software per se does

not lead to a useful, concrete, and tangible result and is deemed to be non-statutory subject

matter under 35 U.S.C. § 101.

However, the claimed invention, as recited in claim 1, is <u>not</u> directed to software *per se*. For example, claim 1 recites "a validation processor ... configured with a prototype interface for receiving ..." It is not possible for abstract ideas or functional descriptive material to be "configured," or to have an "interface for receiving." Neither abstract ideas nor functional descriptive material are capable of being configured or are capable of receiving. Instead, these capabilities/functionalities are found in a device, which is the ordinary and customary meaning attributed to the term "processor" by one having ordinary skill in the art.

Similarly, claim 1 recites "input field *programmed for validation* using said validation processor." It is impossible for either an abstract idea or functional descriptive material to be programmed to validate a field. Abstract ideas are incapable of being programmed because abstract ideas, by definition, are ideas without form or substance. Functional descriptive material (e.g., a piece of paper upon which program code is written) is also entirely incapable of being programmed. On the contrary, one skilled in the art would look only to computer hardware as

<sup>&</sup>lt;sup>1</sup> Black's Law Dictionary 1142 (6th ed. 1990).

1 being programmed. Thus, one skilled in the art would never consider the subject matter 2 encompassed by the claims to be directed to "software per se." 3 4 The Examiner's assertion that "it fails to be tangibly embodied in a computer readable 5 medium" appears to better suited as an enablement rejection under the first paragraph of 35 6 U.S.C. § 112. However, enablement rejections do *not* apply to claims. 7 8 9 On page 11 of the Examiner's Answer, the Examiner reproduced two arguments from the 10 Second Appeal Brief. The Examiner then asserted the following on page 11 of the Examiner's 11 Answer: 12 The Examiner Respectfully Disagrees: The Final office action dated 1/25/2008 has 13 rejected all pending claims and further provided an explanation with citations for all the rejections 14 of each claim as support. Furthermore it has been cited in numerous actions that the teachings of a 15 reference are not limited to specific portions, the reference as a whole must be considered by the 16 apellant. Nonetheless appellant as decided to attack the format/structure used by the examiner to 17 reject the claimed subject matter instead of the underlying rejection itself. Appellant has failed to 18 "clearly designate" which limitations are disagreed upon to disprove the teachings nor show any 19 evidence regarding the differences between the claimed subject matter and the cited references. 20 The Examiner will provide a mapping to each limitation of Independent claim 1 using the previous 21 22 explanations to assist the Apellant. 23 This passage by the Examiner reflects a fundamental understanding by the Examiner as to the 24 Examiner responsibility in establishing a prima facie case of unpatentability. 25 26 The Examiner's implied reference to M.P.E.P. § 2123 (i.e., "a reference are not limited to 27 specific portions, the reference as a whole must be considered") is misplaced. The fact that 28 references are "relevant for all they contain" does not abrogate the Examiner from the 29 responsibility of providing substantial evidence to support the findings of fact underlying the

1 Examiner's analysis. Appellant presented similar comments on page 13 of the Second Appeal

Brief, to which the Examiner did not respond.

Appellant's "attack" on the "format/structure used by the examiner" goes to the how the Examiner establishes a prima face case of unpatentability. The Examiner cannot properly assert that claim X is rejected based upon reference A without any analysis. However, this is very comparable to the Examiner's analysis. Appellant, time and time again, has been left to guess as to both how the Examiner is construing the language of the claims and as to how the Examiner is specifically applying the prior art. For example, Appellant cannot point out errors in the Examiner's claim construction when the Examiner does not explicitly set forth any claim constructions.

Similarly, Appellant cannot argue that feature F does not disclose claimed limitation C when the Examiner does not identify feature F as allegedly corresponding to limitation C. Before Appellant can "'clearly designate' which limitation are disagreed upon to disprove the teachings," the Examiner must first clearly explain the Examiner's analysis. Notwithstanding a dearth of analysis by the Examiner, Appellant has, in fact, made arguments as to specific limitations within both within the Second Appeal Brief and prior to the filing of the Second Appeal Brief.

On pages 12 and 13 of the Examiner's Answer, the Examiner attempted to "provide a mapping to each limitation of Independent claim 1." However, the Examiner's attempt is

1 severely lacking as the Examiner does not appear to recognize that "each limitation" does not 2 refer entire passages of the claim. 3 4 For example, page 12, lines 1-7 of the Examiner's Answer are simply word-for-word 5 reproduction of certain limitations recited in claim 1, for which the Examiner cites, in line 8 on 6 page 12 of the Examiner's Answer, "abstract, fig 3, fig 6, fig 8, paragraphs 5-8, 9-12, 40-41 & 7 appendix A" as teaching. 8 9 Referring to lines page 12, lines 7-15 of the Examiner's Answer, this passage is 10 essentially identical to the passage found in lines 13-19 on page 3 of the Fifth Office Action and 11 the passage found in lines 3-11 on page 5 of the Examiner's Answer. As such, the Examiner has 12 simply reproduced what the Examiner has already written. 13 14 Referring to page 12, line 21 through page 13, line 1 of the Examiner's Answer, this 15 passage is essential identical to the passage found in lines 19-21 on page 3 of the Fifth Office 16 Action and the passage found in lines 11-14 on page 5 of the Examiner's Answer 17 18 Referring to lines 8-16 on page 13 of the Examiner's Answer, this passage is essentially 19 identical to the passage found in lines 21-27 on page 3 of the Fifth Office Action and the passage 20 found in page 5, line 14 through page 6, line 2 of the Examiner's Answer. As such, the Examiner 21 has, yet again, simply reproduced what the Examiner has already written. 22

With the exception of page 12, lines 16-21 and page 13, line 2-8 of the Examiner's Answer, the Examiner's alleged "mapping" is little more than a nearly word-for-word reproduction as to what the Examiner has already written in the statements of the rejection in both the Fifth Office Action and the Examiner's Answer.

The Examiner's <u>new</u> analysis found in page 12, lines 16-21 and page 13, line 2-8 of the Examiner's Answer is apparently in response to the arguments presented in the first full paragraph on page 12 of the Second Appeal Brief, in which Appellant argued that the Examiner failed to address the limitations of the dependent claims that were introduced into claim 1 in the Amendment dated October 30, 2007.

Specifically, referring to page 12, lines 16-21 of the Examiner's Answer, the Examiner presented the following new analysis:

Dziejma discloses <u>a function call to said validation processor further disposed in said markup, said function call having a configuration for passing a reference to a value in said at least one form based input field for validation in said validation processor (appendix A, Dziejma discloses several function calls for the form validation engine within the markup document thereby passing reference values to the input field for validation by the FVE). (emphasis in original)</u>

The Examiner presents a conclusory statement that lacks factual support. The underlined portions of the above-reproduced passage are word-for-word reproductions of the claim limitations and the Examiner's analysis simply refers to Appendix A and repeats the language of the claim by asserting that Dziejma teaches these limitations. As such, the Examiner has, yet again, forced Appellant to guess as to how the Examiner is interpreting the language of the claims and what specific teachings in Sokolov the Examiner is relying upon to teach the specific claimed limitations.

Referring to page 13, line 2-8 of the Examiner's Answer, the Examiner presented the following additional new analysis:

However Sokolov explicitly teaches a library reference to said script library disposed in said markup (see abstract & column 21, Sokolov discloses a plurality of additional function calls to said validation processor disposed in said markup, each additional one of said functional calls having a configuration for passing a reference to a value in a corresponding form based input field for validation in said validation processor; and a validation shell function encapsulating said function calls (see abstract & column 21 (emphasis in original)

Yet again, the Examiner presents a conclusory statement that lacks factual support. The underlined portions of the above-reproduced passage are word-for-word reproductions of the claim limitations. As such, the <u>only analysis</u> presented by the Examiner is to assert that all of these limitations are disclosed in the Abstract and column 21 of Sokolov.

Notwithstanding that Appellant has been forced to guess as to the rationales underlying the Examiner's analysis, the limitations at issue references the validation processor, which, as claimed, validates a form based input against a field validation pattern. The Examiner's cited passages within Sokolov, however, do not refer to a validation processor. Although Sokolov refers to validation, this type of validation is entirely different than that performed by the claimed validation processor. Instead, the validation referred to by Sokolov refers to "validating that the one or more script language instructions conform to script language syntax" (see claim 5; column 2, lines 19-23; column 3, lines 28-30 of Sokolov). Thus, even if Dziejma were modified in view of Sokolov, the claimed invention would not result since Sokolov fails to teach the limitations for which the Examiner is relying upon Sokolov to teach.

In response to arguments presented on pages 9-12 of the Second Appeal Brief as to the Examiner's burden in establishing the underlying findings of fact supporting the Examiner's

analysis and the Examiner's failure to identify, within the '590 Provisional, the subject matter that

supports the Examiner's analysis, the Examiner asserted the following on page 14 of the

#### Examiner's Answer:

The Examiner Respectfully Disagrees: The Examiner has already presented a prima facie case of obviousness and designated, as nearly as practicable, the particular part being relied upon in the rejection by using specific citations of the '218 application. Furthermore the examiner prior to using the provisional date relied upon in the '590 application has already reviewed and determined that "the provisional application properly supports the subject matter relied upon...". Once again the Appellant has failed to **clearly designate** or specifically show which portions used in the rejection are not supported in the '590 provisional application, despite having access to Public Pair. Nonetheless the Examiner will provide the appropriate mappings between the subject matter of the '218 and `590 applications to assist both the Board and the Appellant. (emphasis in original)

The above-reproduced comments again evidence the Examiner's failure to recognize that the initial burden of establishing a prima facie case rests with the Examiner. Moreover, the Examiner's "belief" that "the provisional application properly supports the subject matter relied upon" does not constitute substantial evidence.

On pages 14 and 15 of the Examiner's Answer, the Examiner allegedly "[provided] mappings between the subject matter of the '218 and the '590 applications to assist both the Board and the Appellant." Appellant has reviewed the Examiner's "mapping," and Appellant's position is that this mapping is entirely deficient. Although the Examiner asserts that the following sections were relied upon: "abstract, fig 3, fig 6, fig 8, paragraphs 5-8, 9-12, 40-41 & appendix A," the Examiner did not specifically identify where these sections are supported in the '590 Provisional. More importantly, the Examiner did not identify where the specific teachings being relied upon to reject the claims are supported in the '590 Provisional. Instead, the Examiner generalized the teachings of Dziejma and then generally asserted where these teachings around found in the '590 Provisional. As will be described in further detail below,

much of the drawings and paragraphs relied upon by the Examiner do not find explicit support in 1 2 the '590 Provisional. 3 4 Of Figures 3, 6, & 8 in Dziejma, the text in Figs. 2-4 of the '590 Provisional possibly 5 provides explicit support for Fig. 8 of Dziejma. 6 7 Referring to paragraphs 5-8 of Dziejma, there are no comparable passages in the '590 8 Provisional. 9 10 Referring to paragraphs 9-12, which are found in the "Summary of the Invention Portion" 11 of Dziejma and constitute nearly 1 ½ columns of text, the Summary of the Invention section of '590 only includes 9 lines of text. As such, paragraphs 9-12 are not completely supported by the 12 13 teachings in the '590 Provisional. 14 15 Referring to the respective Abstracts, the Abstract in Dziejma is 18 lines long whereas 16 the Abstract in the '590 Provisional is only 4 lines long. As such, the Abstract is not completely 17 support by the teachings in the '590 Provisional. 18 Referring to the "Detailed Description of the Invention" of the '590 Provisional, which 19 20 constitutes the remaining portion (i.e., pages 2-8) of the teachings in the '590 Provisional, lines 21 10-26 on page 2 partially support paragraph [0023] of the Dziejma. Page 2, line 28 through page 22 3, line 6 of the '590 Provisional support paragraphs [0025] and [0037]-[0039] of Dziejma. Also, 23 page 3, lines 8-18 of the '590 Provisional support paragraphs [0026]-[0036] of Dziejma. Finally,

1	pages 4-8 of the '590 Provisional support Appendix A. Notably, paragraphs [0040], [0041] of
2	Dziejma are <u>not</u> explicitly supported by the '590 Provisional.
3	
4	Therefore, out of the "abstract, fig 3, fig 6, fig 8, paragraphs 5-8, 9-12, 40-41 & appendix
5	A" of Dziejma, which the Examiner relied upon in rejecting the claims, only Fig. 8 and
6	Appendix A find explicit support in the '590 Provisional.
7	
8	
9	In the last half of page 14 of the Second Appeal Brief, Appellant re-presented certain
10	arguments and noted that the Examiner did not address these arguments in the Fifth Office
11	Action. The Examiner's response to these arguments is found in the first full paragraph on page
12	16 of the Examiner's Answer and is reproduced below:
13 14 15 16 17 18	The Examiner Respectfully Disagrees: The FVE (field validation engine, see abstract) of Dziejma represents a shell that describes several validation function calls encapsulated within the underlying HTML document (see appendix A). Function calls encapsulated within a validation shell of markup (590 Provisional: see FVE code pg 4-8 teachings several functional calls encapsulated in a validation shell which is within the FVE Code).
19	The Examiner's response isn't to specifically identify the allegedly disclosing feature. Instead,
20	the Examiner makes a blanket assertion that the field validation of Dziejma discloses the claimed
21	limitation at issue and refers to Appendix A of Dziejma/pages 4-8 of the '590 Provisional. Such
22	a blanket analysis is entirely deficient in properly characterizing the scope and content of the
23	applied prior art.
24	
25	

1	In response to the arguments presented on pages 15-17 of the Second Appeal Brief, the
2	Examiner initially asserted the following in the paragraph spanning pages 16 and 17 of the
3	Examiner's Answer:
4 5 6 7 8 9	The Examiner Respectfully Disagrees: Dziejma paragraph 40 states "The described form validation method may be also used on the server for performing server-side validation. In that case the form validation engine resides in the server and the form with the embedded markers and data is submitted to the server either locally or via the network connection." (emphasis in original)
10	Appellant is unclear as to the importance of this cited portion of paragraph [0040] of Dziejma.
11	This passage describes that the form validation engine resides in the server alone or may reside
12	in the server and be used in addition to client-side validation. Thus, Dziejma refers to two
13	different form validation engines. Importantly, the whole of the Examiner's analysis relies upon
14	the teachings within Dziejma associated with the form validation engine, which resides in the
15	client. See page 5, line 7 and page 12, line 13 of the Examiner's Answer and page 3, line 16 of
16	the Fifth Office Action, which all state "[f]urthermore all is done on the client device."
17	
18	By relying upon teachings of the form validation engine residing in the server, then the
19	Examiner gives up the teachings of Dziejma associated with the form validation engine residing
20	in the client, which is the subject of the claimed invention and the Examiner's analysis. Put
21	differently, the Examiner cannot rely upon teachings associated with the form validation engine
22	of Dziejma residing in the server to modify teachings associated with the separate form
23	validation engine of Dziejma residing in the client.
24	
25	The Examiner further asserted the following in the remaining portion of the above-
26	referenced paragraph:
27 28	Although Dziejma teaches the use of JavaScript in the FVE, he only shows function calls defined within the engine and fails to show reference to a separate library objects referenced by JavaScript.

1 2 3 4 However Sokolov explicitly teaches the use of libraries which are interfaced with JavaScript (see abstract). Thus at the time of the invention it would have been obvious to the skilled artisan to have modified the script definitions of Dziejma to include reference to various JavaScript libraries has taught by Sokolov to provide extensibility to the field validation engine of Dziejma. 5 6 This passage, however, is nearly identical to the passage found in the paragraph spanning pages 7 3 and 4 of the Fourth Office Action and reproduced on page 15 of the Second Appeal Brief, 8 which Appellant has already addressed. 9 10 11 In response to the arguments presented on pages 17 and 18 of the Second Appeal Brief, the Examiner asserted the following in the paragraph spanning pages 16 and 17 of the 12 13 Examiner's Answer: 14 The Examiner Respectfully Disagrees: Appellant has once again failed to provide evidence to 15 show which sections of the specification in detail define the term "Pervasive device", instead 16 relying on his own opinion. The Examiner however provides the general definition of the term 17 Pervasive to give the claim broadest reasonable interpretation. 18 19 20 Google: Definition of: Pervasive: Manifested throughout; pervading, permeating, penetrating or affecting everything 21 22 23 Thus the teachings of Dziejma have already established a client/server software architecture as that well known in the art. Since Dziejma supports both server side and client side validation as 24 recited in paragraph 40 he describes a pervasive device (client device), since a client device is 25 26 manifested throughout a typical distributed system. Furthermore since the access to the server from the users client machine shown in fig 1 and described in paragraph 22 is done accessing a 27 URL, it would have been obvious for the skilled artisan to have used the client device 28 (Specifically including a PDA/mobile device) to access a URL, since Sokolov deals with markup 29 documents (see column 1, lines 55-67 of Sokolov). 30 31 The Examiner's analysis includes multiple flaws. The Examiner's analysis, yet again, evidences 32 a failure to recognize that the burden rests with the Examiner in establish a prima facie case of 33 unpatentability. Before making a proper comparison between the claimed invention and the prior art, the language of the claims must first be properly construed.<sup>2</sup> With the exception of the 34

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<sup>&</sup>lt;sup>2</sup> See In re Paulsen, 30 F.3d 1475, 1479 (Fed. Cir. 1994); see also, Panduit Corp. v. Dennison Mfg. Co., 810 F.2d 1561, 1567-68 (Fed. Cir. 1987) (In making a patentability determination, analysis must begin with the question, "what is the invention claimed?" since "[c]laim interpretation, . . . will normally control the remainder of the

Examiner's Answer, the Examiner had not yet attempted to construe a meaning for the term

"pervasive device."

The Examiner's analysis is also flawed by construing a meaning for "pervasive" and not for "pervasive device," which was actually claimed and is a term of art. Specifically, reference is made to the "Background of the Invention" section of U.S. Patent No. 6,925,481, which states the following:

Pervasive devices (also referred to as "pervasive computing devices") have become popular in recent years as people increasingly seek "anywhere, anytime" access to services such as voice and data communications. Many pervasive devices are designed to be mobile, and may equivalently be referred to as "mobile devices" or "mobile computing devices". Examples of mobile pervasive devices range from two-way pagers to personal digital assistants, or "PDAs" (such as the Palm Pilot, Handspring Visor.TM., or Compaq iPAQ) to cellular phones (such as the Nokia 6110) to multi-function devices (such as the Nokia 9110 or Qualcomm "pdQ.TM." smartphone). ("Visor" is a trademark of Handspring, and "pdQ" is a trademark of QUALCOMM Incorporated.) All pervasive devices are not necessarily mobile, however. Examples of this latter category include smart appliances for the home or business setting, devices which are permanently mounted in automobiles, and so forth.

Pervasive devices typically share several common characteristics:

limited processor speed;
 limited memory capacity;

3) small size, which limits the richness of the data input and output interfaces (for example, small screen, limited keypad, and so forth);

4) a limited amount of software pre-installed on the device; and 5) access to limited-bandwidth networks.

Referring to paragraphs [0006] and [0007] of Appellant's disclosure, Appellant contrasted mobile device (i.e., an a pervasive device) with conventional computing clients. Although paragraph [0017] describes that the pattern validation system could be used for any type of device, the claimed "*lightweight* pattern validation system" is particularly useful in systems with limited processor speed, limited memory capacity, etc., which are characteristics of a pervasive device including, for example, cellular telephones and personal digital assistants.

6

Thus, based upon the broadest reasonable interpretation that one having ordinary skill in the art would reach, the teaching of a generic "client device" by Dziejma, as alleged by the Examiner, does not correspond to the claimed "pervasive device." Although the Examiner refers to teachings within Sokolov, the Examiner did not rely upon Sokolov in the statement of the rejection as to claim 15 (see page 9 of the Examiner's Answer).

For the reasons set forth in the Second Appeal Brief and for those set forth herein,

Appellant respectfully solicits the Honorable Board to reverse the Examiner's rejections under 35

U.S.C. §§ 101, 103.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is

hereby made. Please charge any shortage in fees due in connection with the filing of this paper,

including extension of time fees, to Deposit Account 09-0461, and please credit any excess fees to

such deposit account.

Date: September 22, 2008

Respectfully submitted,

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**CUSTOMER NUMBER 46320**